

Date: Monday, 5/15/2006 11:14:23 AM  
 User: Linda Lacelle

## Process Sheet

Customer	: CC-DAR01 Dart Aerospace Ltd.	Drawing Name	: D2877
Job Number	: 27129		
Estimate Number	: 10804		
P.O. Number	: N/A	Part Number	: D2877
This Issue	: 5/15/2006 S.O. No. : N/A	Drawing Number	: Z_CUSTOM
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : N/A	Drawing Revision	: N/A
Previous Run	: 27040	Material	: N/A
Written By	: SEE COMMENT BELOW	Due Date	: 5/22/2006
Checked & Approved By	: SEE ABOVE USER & DATE	Qty:	24 Um: Each
Comment	:		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



Comment: FLOW WATER JET  
 MAKE PER DRWG D2877 REV.B

2.0	M5052H32S125	5052-H32 .125 Sheet
-----	--------------	---------------------



Comment: Qty.: 0.0500 sf(s)/Unit Total : 1.2000 sf(s)  
 5052-H32 .125 Sheet m 16954

ml 06 05 15

3.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



Comment: FLOW WATER JET  
 DEBURR

SAD 06:05:15 26

4.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

06.05.15 26

5.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
-----	-----------------	----------------------------



Comment: HAND FINISHING RESOURCE #1  
 ACID ETCH & ALODINE

SAD 06:05:15 26

6.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1  
 IDENTIFY & STOCK

u 06.05.15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA:  Date: 06/05/15

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Date: Monday, 5/15/2006 11:14:23 AM  
User: Linda Lacelle

## Process Sheet

Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: D2877

Job Number: 27129

Part Number: D2877

Job Number:



Seq. #:

Machine Or Operation:

Description :

7.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL  
INSPECT LEVEL 21

26  
D 06/05/15

Job Completion



LL 06/05/15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

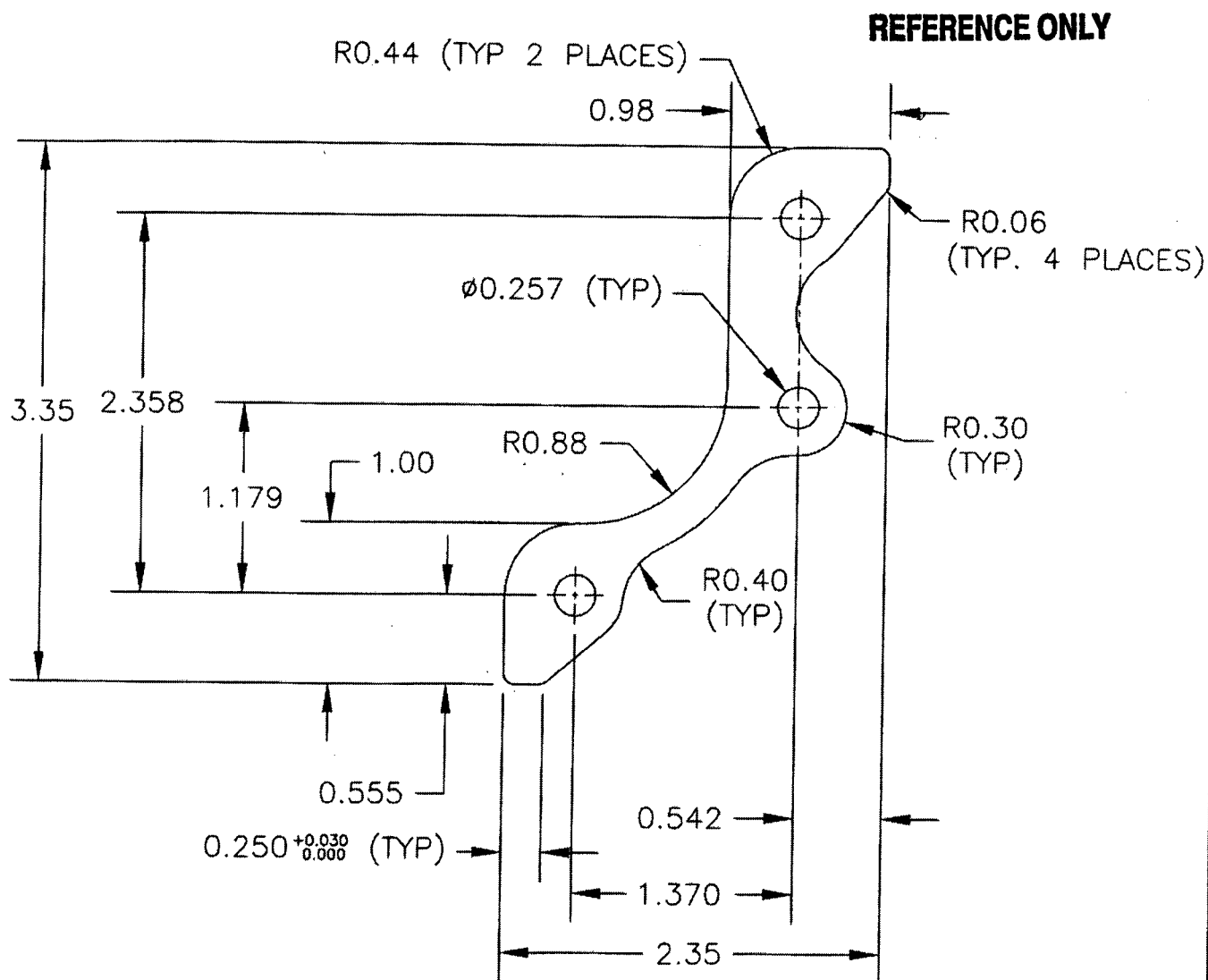
NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>DA</i>	APPROVED <i>CP</i>	DRAWING NO. D2877	REV. A SHEET 1 OF 1
DATE 99.02.23		TITLE SADDLE SPACER	SCALE 1:1
A	99.02.23	NEW ISSUE	

RELEASED  
99.04.27 DS



MATERIAL: 5052-H32/H34 (QQ-A-250/8) 0.100 THICK  
FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
BREAK ALL SHARP EDGES 0.010 TO 0.020

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

## Linda Lacelle

**From:** Bill Beckett [bbeckett@dartaero.com]  
**Sent:** Monday, May 15, 2006 10:38 AM  
**To:** pmcdonald@dartaero.com  
**Cc:** heatherm@dartaero.com; Dale Trepanier (E-mail); Linda Lacelle (E-mail); Brigitte Golden (E-mail); Sue Bedford (E-mail)  
**Subject:** RE: Apical float skid gear

Peggy,  
Grrrrrrr!!!...but what can we do!?  
We hope to be able to send another set today. We don't have any extras, but we will load up on the Waterjet ASAP.  
I assume you will send us a "no-charge" order for these.  
Bill  
PS: Dale - there should be a CSR reference given to Peggy for this.

-----Original Message-----

From: Peggy McDonald [mailto:pmcdonald@dartaero.com]  
Sent: May 15, 2006 10:25 AM  
To: 'Linda Lacelle (E-mail)'  
Cc: h  
Subje

Bill

PLed

Tha

Peg

--

Fr

Se

Tc

Cc

Si

I

Hello Peggy,

Would you please send another set or shims. We can't find them. t us never reach the right department and we can't find them.

Please send them to my attention and provide w/b.

Thanks. Eric

-----Original Message-----

From: Auger, Ghislain  
Sent: Monday, May 15, 2006 9:00 AM  
To: Couture, Michel; Corbeil, Luc; Laty, Eric  
Cc: Bastien, Jean-Francois; Lavoie, Julie  
Subject: RE: Apical float skid gear  
Importance: High

Eric can you go back to Dart to order other shims we can't find the package and the job need to be complete.  
Thanks!

-----Original Message-----

From: Couture, Michel  
Sent: Friday, May 12, 2006 1:13 PM  
To: Auger, Ghislain; Corbeil, Luc  
Cc: Bastien, Jean-Francois; Lavoie, Julie  
Subject: RE: Apical float skid gear

Pour votre info. en ce merveilleux vendredi 13:15 hre ce colis n'est toujours pas en ma possession . m.c.

-----Original Message-----

From: Auger, Ghislain  
Sent: Thursday, May 11, 2006 7:15 AM  
To: Couture, Michel  
Subject: FW: Apical float skid gear

Peut-tu verifier et donner les pieces a Luc Corbeil.  
Merci!

-----Original Message-----

From: Bill Beckett [mailto:bbeckett@dartaero.com]  
Sent: Wednesday, May 10, 2006 4:13 PM  
To: Auger, Ghislain  
Cc: pmcdonald@dartaero.com; Laty, Eric; 'David Shepherd'  
Subject: RE: Apical float skid gear

Ghislain,  
This was shipped May 8.

FedEx Priority overnight  
Tracking no: 792091801091  
Attention: Eric Laty  
It was received at Mirabel 10:00 am on May 9 and signed for by a Mr. Gagnon.

Let me know ASAP if you need any further information or help.

Best Regards,  
Bill Beckett  
General Manager  
Dart Aerospace  
1270 Aberdeen Street  
Hawkesbury, Ontario  
K6A 1K7 Canada  
Ph (613) 632-3336  
Fax (613) 632-5246  
Cell (514) 862-7585  
bbeckett@dartaero.com  
www.dartaero.com

-----Original Message-----

From: Auger, Ghislain [mailto:GAuger@bellhelicopter.textron.com]  
Sent: May 10, 2006 9:37 AM  
To: Laty, Eric; 'David Shepherd'  
Cc: 'pmcdonald@dartaero.com'; 'Bill Beckett'  
Subject: RE: Apical float skid gear

No new about that ??

Eric can you take care of that?

-----Original Message-----

From: Laty, Eric  
Sent: Friday, May 05, 2006 11:00 AM  
To: Auger, Ghislain; 'David Shepherd'  
Cc: 'pmcdonald@dartaero.com'; 'Bill Beckett'  
Subject: RE: Apical float skid gear

Please send them to my attention and provide Fedex Pl W/B.

Thanks.

Eric Laty  
Acheteur  
Bell Helicopter TEXTRON  
elaty@bellhelicopter.textron.com  
12800, rue de l'Avenir  
Mirabel (Québec) J7J 1R4  
Canada  
Tel : (450) 971-6500 ext 2441  
Fax : (450) 437-2848

-----Original Message-----

From: Auger, Ghislain  
Sent: Friday, May 05, 2006 7:19 AM  
To: 'David Shepherd'  
Cc: pmcdonald@dartaero.com; Bill Beckett; Laty, Eric  
Subject: RE: Apical float skid gear  
Importance: High

We need these shims for lh and rh for six aircrafts ,if possible as soon as you can because we wait about that to complete this installation for flight check.  
Thanks!

Eric ,can you take care of that?

-----Original Message-----

From: David Shepherd [mailto:davids@dartaero.com]  
Sent: Thursday, May 04, 2006 4:31 PM  
To: Auger, Ghislain  
Cc: pmcdonald@dartaero.com; Bill Beckett; Laty, Eric  
Subject: Re: Apical float skid gear

Ghislain,

I have discussed with Bill Beckett, and Dart will provide thicker shims for you to try out early next week.  
Do you need them for both saddles (LH and RH) or just one side. And how many aircraft? Just one?

Thanks,  
David

----- Original Message -----

From: "Auger, Ghislain" <GAuger@bellhelicopter.textron.com>  
To: "'David Shepherd'" <davids@dartaero.com>  
Cc: <pmcdonald@dartaero.com>; "Bill Beckett" <bbeckett@dartaero.com>; "Laty, Eric" <ELaty@bellhelicopter.textron.com>  
Sent: Thursday, May 04, 2006 12:57 PM  
Subject: RE: Apical float skid gear

> We already followed that procedure ,as per the installer he torqued to the  
> upper range and followed the pattern mentioned  
> in the IIN .Finally rechecked all torques.We still with this situation.  
> Best Regards.

>  
>  
>  
> -----Original Message-----  
> From: David Shepherd [mailto:davids@dartaero.com]  
> Sent: Thursday, May 04, 2006 2:21 PM  
> To: Auger, Ghislain  
> Cc: pmcdonald@dartaero.com; Bill Beckett; Laty, Eric  
> Subject: Re: Apical float skid gear

> Ghislain,

>  
> Before we do anything too drastic here, just wanted to check a couple of  
> things:  
> 1) The IIN gives a torque range on all saddle bolts. If you are not  
working  
> to the upper range, I would suggest that in this case, you work to the  
upper  
> range on all bolts.  
> 2) After you have torqued everything up, have you gone through the torque  
> pattern a second time to ensure that you are holding the upper torque  
> values.

> Thanks for your patience.

> David

> ----- Original Message -----  
> From: "Auger, Ghislain" <GAuger@bellhelicopter.textron.com>  
> To: "'David Shepherd'" <davids@dartaero.com>  
> Cc: <pmcdonald@dartaero.com>; "Bill Beckett" <bbeckett@dartaero.com>;  
"Laty,  
> Eric" <ELaty@bellhelicopter.textron.com>  
> Sent: Wednesday, May 03, 2006 11:56 AM  
> Subject: RE: Apical float skid gear

>  
>  
> > David ,  
> > Here is the information you ask me ,the diameter of the tube in the  
saddle  
> > is 3.00 inches.  
> > Sorry you're right the gap was 0.090.  
> > I've attached some picture of the installation.  
> > Thanks!

> > -----Original Message-----  
> > From: David Shepherd [mailto:davids@dartaero.com]  
> > Sent: Wednesday, May 03, 2006 11:24 AM  
> > To: Auger, Ghislain  
> > Cc: pmcdonald@dartaero.com; Bill Beckett; Laty, Eric  
> > Subject: Re: Apical float skid gear

> >  
> > You must mean 0.090 gap. Can you take a picture to show me exactly  
where  
> > this 0.090 gap is. There should be no gap at the top and a small gap at  
> the  
> > bottom. Also, what is the OD of the crosstube cuff going into saddle.

> >  
> > Thanks,  
> > David  
> >  
> >  
> > ----- Original Message -----  
> > From: "Auger, Ghislain" <GAuger@bellhelicopter.textron.com>  
> > To: "'David Shepherd'" <davids@dartaero.com>  
> > Cc: <pmcdonald@dartaero.com>; "Bill Beckett" <bbeckett@dartaero.com>;  
> > "Laty,  
> > Eric" <ELaty@bellhelicopter.textron.com>  
> > Sent: Wednesday, May 03, 2006 6:35 AM  
> > Subject: RE: Apical float skid gear  
> >  
> >  
> > > We know as per your previous email that the gap is acceptable to you  
but  
> > > presently we have an other skid gear with about .90 gap at the aft  
> > > crosstube saddle even with the d2876 saddle spacer installed. My  
question  
> > is  
> > > :is it acceptable to modified the spacer to close the gap and if it's  
> > > the case can you provided us a thicker shim.  
> > > Best Regard!  
> > >  
> > > Ghislain Auger  
> > > BELL HELICOPTER(CANADA)  
> > > Technologue IV  
> > > (450)971-6500 ext:3394  
> > > Beeper:\*73-261  
> > > Email:gauger@bellhelicopter.textron.com  
> > >  
> > >  
> > >  
> > > -----Original Message-----  
> > > From: David Shepherd [mailto:davids@dartaero.com]  
> > > Sent: Monday, April 10, 2006 4:31 PM  
> > > To: Auger, Ghislain  
> > > Cc: pmcdonald@dartaero.com; Bill Beckett  
> > > Subject: Re: Apical float skid gear  
> > >  
> > >  
> > > The gap shown in the pictures is acceptable (and typical) as long as  
you  
> > > respect the torques in the Dart Installation Instructions. You should  
> > > find  
> > > that the gap is closed at the top, but the important thing is that you  
> > > don't overtorque.  
> > >  
> > > David  
> > >  
> > >  
> > > ----- Original Message -----  
> > > From: "Auger, Ghislain" <GAuger@bellhelicopter.textron.com>  
> > > To: <davids@dartaero.com>  
> > > Sent: Monday, April 10, 2006 1:43 PM  
> > > Subject: FW: Apical float skid gear  
> > >  
> > >  
> > > > As per Discuss with Peggy on that issue,  
> > > > Do you have any developments?  
> > > >  
> > > >  
> > > > -----Original Message-----  
> > > > From: Auger, Ghislain  
> > > > Sent: Friday, April 07, 2006 1:27 PM  
> > > > To: 'peggy@dartaero.com'

> > > > Cc: Corbeil, Luc; Lavoie, Julie  
> > > > Subject: Apical float skid gear  
> > > >  
> > > > Peggy,  
> > > >  
> > > > I have a question regarding the installation of the apical float  
> skid  
> > gear  
> > > > D412-664-203 for the saddle installation on the aft crosstube.  
> > > > Is it acceptable to have a gap in between the saddle even if we  
> > followed  
> > > > the torque sequence of the IIND412-742 P.6 figure 1?  
> > > > Thanks!  
> > > >  
> > > > I've attach a document to show you the situation.  
> > > >  
> > > > <<APICAL SKID BOOTS PICTURES.xls>>  
> > > >  
> > > > Ghislain Auger  
> > > > BELL HELICOPTER(CANADA)  
> > > > Technologue IV  
> > > > (450)971-6500 ext:3394  
> > > > Beeper:\*73-261  
> > > > Email:gauger@bellhelicopter.textron.com  
> > > >  
> > > >  
> > >  
> > >  
> >  
> >  
> >  
> >  
>  
>

